

## **CONCEPT 2: TRANSFORMING THE MISSISSIPPI RIVER: MANIPULATING THE MISSISSIPPI RIVER SYSTEM TO FACILITATE NAVIGATION AND MANAGE FLOOD FLOWS**

### **GOAL**

The goal of this concept is to convey, through the use of tour routes and various destinations in the Delta, the Mississippi River's impact upon the Lower Mississippi Delta Region, specifically the geophysical evolution of the river system, the manipulation of the river system to manage flood flows and facilitate navigation, and the river towns that reflect the region's diverse cultures.

### **IMPORTANCE/SIGNIFICANCE**

As North America's longest and largest river, draining approximately 40% of the continental United States and uniting the contiguous nation's northern and southern extremes, the Mississippi River is perhaps the United States' best known geographic feature and one of the most complex ecosystems on the planet. The river is also of unquestionable significance to the nation's heritage and generations of Indians, explorers, settlers, steamboat pilots, writers, painters, and musicians have contributed to its legend. As a

major conduit of a vast interior waterway, the Mississippi River has been the object of wars, the provider for the heartland of a nation, and a cradle for cultures and communities that have grown, prospered, and died on its banks. The river remains an enduring dimension of American culture and an integral part of the American mystique.

### **RESOURCES**

Resources along the Mississippi River corridor are as diverse as the stories that are told about the great River. The Great River Road would be an important resource in implementing this concept. Geological sites and river towns all along the river would give visitors a sense of changes over time and would allow them to experience life on the River from many vantage points. Museums, historic sites, visitor centers, and the levee system itself would all be utilized to tell the fascinating stories of the Mississippi River and its impact on the Delta.

## RESOURCES

- Geological exhibits of the region and displays of regional minerals and fossils are found at Ed Clark Museum of Missouri Geology, Memphis Pink Palace Museum, Mississippi River Museum, and Cottonlandia Museum.

### Sites Representative of Region's Geophysical Transformation

11. Giant City Geologic Area, Giant City State Park (Carbondale, Illinois)
12. Lower Cache River Swamp (Carbondale, Illinois)
13. Pickle Springs (Farmington, Missouri)
14. Big Oak Tree State Park (East Prairie, Missouri)
15. Elephant Rocks State Park (Graniteville, Missouri)
16. Reelfoot Lake (Tiptonville, Tennessee)
17. Crowley's Ridge Parkway (Paragould, Arkansas)
18. Harrell Prairie Hill, Bienville National Forest (Jackson, Mississippi)
19. Mississippi Petrified Forest (Flora, Mississippi)

### Natural Resources of the Mississippi River System

A sampling of the region's varied resources near the Mississippi River system, emphasizing hardwood forests, wetlands, and diverse habitats, many of which are national natural landmarks:

20. Little Grand Canyon Area (Carbondale, Illinois)
21. Horseshoe Lake Natural Preserve (Cairo, Illinois)
22. Henderson Sloughs (Uniontown, Kentucky)
23. Chickasaw National Wildlife Refuge (Ripley, Tennessee)
16. Reelfoot Lake (Tiptonville, Tennessee)
24. Big Lake Natural Area, Big Lake National Wildlife Refuge and Wildlife Management Area (Blytheville, Arkansas)
25. White River Sugarberry Natural Area, White River National Wildlife Refuge (Helena, Arkansas) - three bottom land hardwood forest types and diversity of wildlife
26. Delta National Forest, Green Ash, Overcup Oak, and Sweetgum Research Natural Areas (Yazoo City, Mississippi)

27. Saint Catherine Creek National Wildlife Refuge (Natchez, Mississippi)
28. Delta National Wildlife Refuge (Venice, Louisiana)

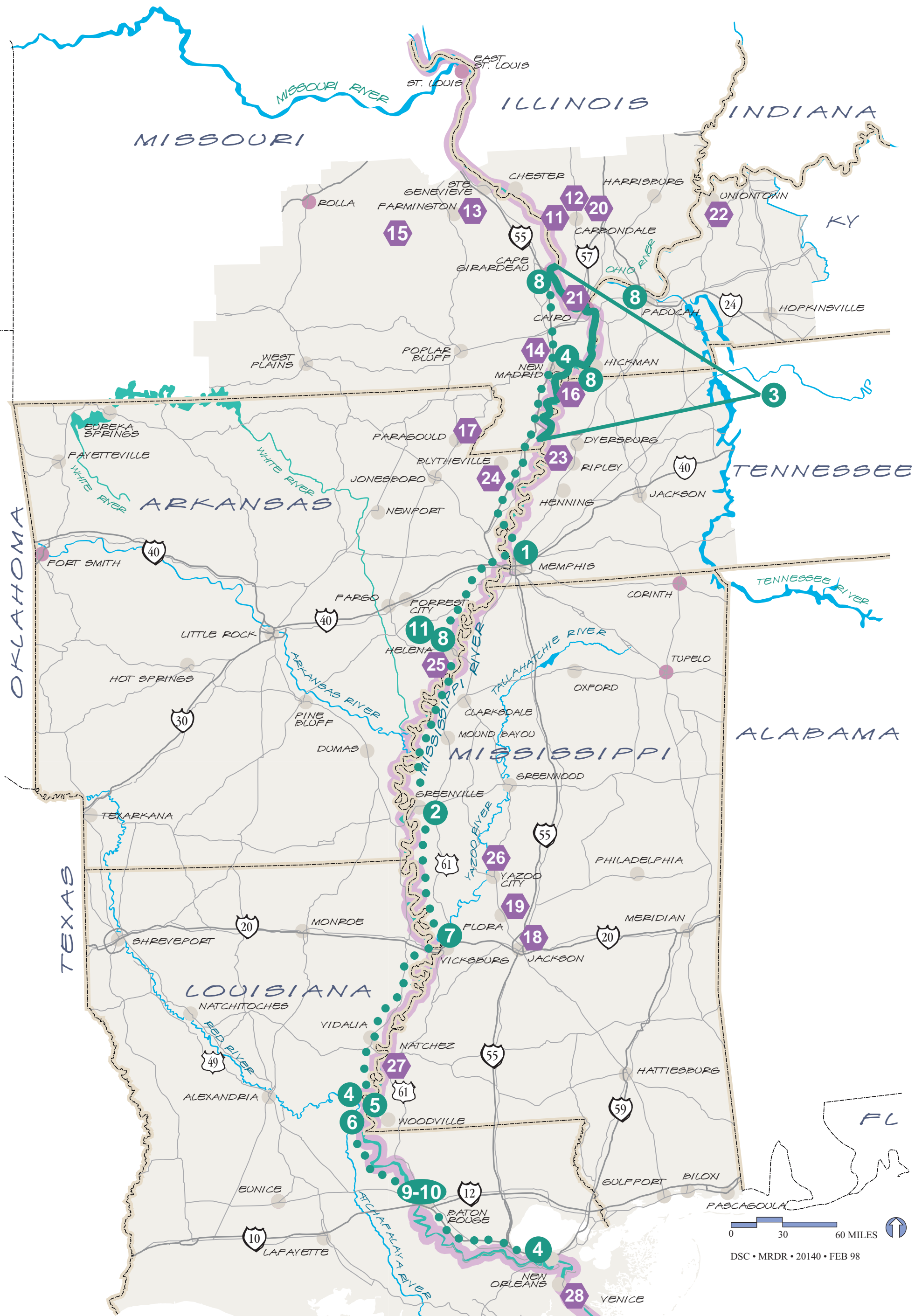
### Manipulating the Mississippi River System to Manage Flood Flows and Facilitate Navigation

- The mainline levee system extends along both banks of the Mississippi River from approximately Cape Girardeau, Missouri to the Gulf of Mexico, except where tributaries intersect the Mississippi River and high ground parallels the river. Some sections of the levee system are available to drive upon. The levees along the south banks of the Arkansas and Red Rivers in the Atchafalaya Basin.
1. Mississippi River Museum (Mud Island) - Memphis, Tennessee
  2. Greenville Flood (1927) Museum - Greenville, Mississippi
  3. The Little River Drainage District of Southeast Missouri, from Cape Girardeau, Missouri southward to the Missouri-Arkansas state line
  4. Floodways to divert excess flows: (1) Birds Point to New Madrid, Missouri floodway; (2) Morganza and West Atchafalaya floodways in Louisiana, and (3) Bonnet Carré Spillway upstream of New Orleans
  5. - 6. Three sites near the Mississippi River approximately 40-50 miles upstream of Baton Rouge include: (1) Old River Control structures and lock and dam, (2) Sidney A. Murray, Jr. Hydroelectric Station, component of Old River Control complex, and (3) Morganza Flood Control Structure
  7. Waterways Experiment Station Visitor Center (principal research and testing laboratory of the Corps of Engineers) - Vicksburg, Mississippi
  8. Flood walls at Cape Girardeau; Paducah, Kentucky; Hickman, Kentucky; and Helena Arkansas.
  - 9.-10. Port Allen Lock (Port Allen, Louisiana) and Plaquemine Lock (Plaquemine, Louisiana)
  11. Huxtable Pumping Plant (Marianna, Arkansas)

## RESOURCES

### River Towns along the Lower Mississippi River System

1. St. Genevieve, Missouri – Historic St. Genevieve
2. Cape Girardeau, Missouri – Historic Downtown and Riverfront
3. New Madrid, Missouri - New Madrid Museum
4. Cairo, Illinois – Confluence of the Mississippi and Ohio Rivers
5. Paducah, Kentucky – Historic Downtown and Lower Town
6. Wickliffe, Kentucky - Wickliffe Mounds
7. Columbus, Kentucky - Columbus - Belmont Battlefield State Park
8. Hickman, Kentucky – Buchanan Street Historic District.
9. Memphis, Tennessee – Overton Park Historic District.
10. Helena, Arkansas – Delta Cultural Center, slave and Confederate soldier cemeteries.
11. Greenville, Mississippi - Mississippi's Largest City on the Mississippi River
12. Vicksburg, Mississippi – Historic Downtown.
13. Natchez, Mississippi – Natchez Bluffs and Under-the-Hill Historic District; Natchez-on-top-of-the-Hill Historic District; Cemetery Bluffs Historic District; Clifton Heights Historic District; Upriver Residential Historic District; Holy Family Catholic Church Historic District; and Woodlawn Historic District
14. Baton Rouge, Louisiana – Historic Downtown
15. New Orleans, Louisiana – Vieux Carré Historic District and Garden District



1 - 11

RESOURCES ASSOCIATED WITH  
MANIPULATING THE RIVER  
TO FACILITATE NAVIGATION  
AND MANAGE FLOOD FLOWS

11 - 28

GEOPHYSICAL TRANSFORMATION  
AND NATURAL RESOURCE SITES



HERITAGE TOUR ROUTE

*Lower Mississippi  
Delta Region*

HERITAGE STUDY

## CONCEPT 2

TRANSFORMING THE MISSISSIPPI RIVER:  
MANIPULATING THE MISSISSIPPI RIVER  
SYSTEM TO FACILITATE NAVIGATION  
AND MANAGE FLOOD FLOWS



0 30 60 MILES  
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- 1 - 15 RIVER TOWNS
- HERITAGE TOUR ROUTE

Lower Mississippi  
Delta Region  
HERITAGE STUDY

**CONCEPT 2A**  
TRANSFORMING THE MISSISSIPPI RIVER:  
MULTIPLE HERITAGE TOURS AND  
DESTINATIONS IN THE  
LOWER MISSISSIPPI DELTA REGION